#### CONCLUSION

Social insurance is clearly a field in which actuarial science should be be an important factor. This has been recognized by executive and legislative branches of the federal government and also by at least some state governments. Members of the Society have played an important part in these various areas of government. Some have done so as government employees, others as advisers to the executive and legislative branches of national and state governments, others as representatives of insurance and other organizations, and still others as individuals.

To carry on research in the broad scope encompassed by social insurance requires the continual recruitment and training of a large body of students. Through his course of readings, the actuarial student can become acquainted with the fundamental principles of social insurance. With this groundwork, opportunities to participate actively in the study or development of social insurance programs can be found on business, professional, and community levels.

It is my hope that this panel discussion will inspire a number of our younger members to interest themselves in social insurance and find ways in which they can render a public service. The need for this is acute, since actuaries who have been active in social security from the outset are disappearing from the scene.

#### CANADA

## WILLIAM M. ANDERSON:

In the course of Canada's rapid evolution as an urban industrial economy, characterized by small two-generation families supported by money wages, a variety of public income security programs have been developed, and the emerging pattern is not as yet completely determined.

In this survey attention is focused on the general public programs. Omitted from consideration are those programs where government is acting in the capacity of an employer, for example, pensions for government employees (both civil and military) and for veterans. Omitted also are the workmen's compensation programs conducted under autonomous provincial funds and financed by levies on employers which are very similar to the premiums which would be charged by a private insurance system.

#### GENERAL DESCRIPTION OF PROGRAMS

The general income security programs are as follows:

1. Old Age Security provides payments of \$65 monthly to all persons age 70 and over, subject to moderate residence requirements and to the inclusion of the

payments as income for tax purposes. The program commenced in 1952, replacing the former means-tested Old Age Pensions which had originated in 1927. The initial 1952 benefit level of \$40 monthly was raised to \$46 and then to \$55 in 1957, where it remained until the increase to \$65 in February, 1962.

- 2. Family Allowances provide payments of \$6 monthly in respect of children under age 10 and \$8 monthly in respect to those age 10 to 15 inclusive (the Province of Quebec extends the system to school children age 16-18 inclusive by payments of \$10 monthly through the ten months of each school year). Eligibility for family allowances results in a reduction of \$250 in the annual income-tax exemption which may be claimed in respect of a child. For a small minority of high-income families, the result is a tax increase in excess of the amount of the allowance. The Family Allowance program originated in 1945 and has undergone very little change. An original reduction in payment level for fifth and subsequent children was discontinued in 1949, while the four original age groups with payments ranging from \$5 to \$8 monthly were reduced to the two present age groups in 1957.
- 3. Unemployment Insurance provides weekly wage-related payments during involuntary unemployment. In the top wage class of \$69 weekly or more (salaried workers at pay levels above \$105 weekly are not covered compulsorily), the weekly benefit level is \$27 (\$36 for a person with one or more dependents). In the lower earnings classes, benefits range between 36 and 67 per cent of earnings for single persons and between 48 and 89 per cent for persons with dependents. Benefits commence after a one-week waiting period and can extend for as long as fifty-two weeks if sufficient contributions have been made. During the winter period from December 1 to May 15, seasonal benefits are available to certain classes of persons not otherwise entitled or who have exhausted their benefit periods. The system covers about 78 per cent of all nonagricultural civilian employees, the exclusions being permanent civil servants, domestic servants, teachers, nurses, and salaried workers above \$105 weekly. Since the inception of the program in 1941, there have been six upward revisions in maximum benefit levels which are now more than double their original amounts. In addition, a number of extensions of coverage have occurred, and, in particular, the seasonal benefits program has been expanded far beyond its earlier role.
- 4. Categorical Assistance Programs provide means test payments to persons in defined categories. Three of these programs provide maximum payments equal to the Old Age Security level (i.e., \$65 monthly at present), with somewhat higher levels of allowable income. These programs are Blindness Allowances (dating originally from 1937) for blind persons age 18 and over who are not eligible for Old Age Security; Old Age Assistance (dating from 1952) for persons age 65 and over who are not eligible for Old Age Security or Blindness Allowances; and Disability Allowances (dating from 1954) for totally and permanently disabled persons aged 18 and over who are not eligible for Old Age Security or either of the other assistance programs. The

fourth categorical assistance program is that of Mothers' Allowances, which has been operating on an exclusively provincial basis for half a century. The program provides varying patterns of assistance in different provinces to families where there are dependent children and no bread winning parent. In recent years several provinces have abandoned Mothers' Allowances as a categorical assistance program and included it as part of their General Assistance activity.

5. General Assistance Programs (often called "Unemployment Assistance" or "Direct Relief") now have virtually country-wide application on what is designed to be a needs tested budgetary deficiency basis but which is circumscribed in its intent by various maximum limits on assistance payments and by the practice in some provinces (where the program is administered locally) of making portions of the legislation permissive rather than mandatory. The program has evolved gradually from the original municipal responsibility for direct relief of unemployables. The depressed era of the thirties witnessed the major intervention of provincial and federal governments and consequent attempts to distinguish responsibility by level of government as between unemployed employables and unemployable persons. The federal-provincial agreements under the Unemployment Assistance Act of 1956 as amended in 1957 have confirmed joint financing responsibility for single community-wide general assistance programs. Under this legislation the programs have expanded from noncategorical assistance alone to include (particularly in the high income provinces) the provision of needs tested supplements to all of the income security programs. Thus general assistance is becoming the primary method of providing for budgetary deficiencies attributable to the inability of other income security measures to take account of the particular circumstances of individual families.

## FINANCIAL MAGNITUDE, ADMINISTRATION AND FINANCING

During 1961 the benefits under the general public income security programs totaled \$1,745 million, accounting for 7.3 per cent of total disposable personal income in Canada and providing for 7.7 per cent of total personal consumer expenditure. Of the total payments, 86 per cent were administered and financed by the federal government (32 per cent Old Age Security, 28 per cent Family Allowances, and 26 per cent Unemployment Insurance). The remaining payments (14 per cent) consist of the four categorical assistance programs (9 per cent) administered provincially and the general assistance programs (5 per cent) with mixed provincial and local administration. Under the federal-provincial sharing agreements, the federal government is bearing about 50 per cent of the aggregate cost of the several assistance programs, so that the federal government's share of the total income security financing is 93 per cent. Because of the February increase in Old Age Security to \$65 monthly, it may be estimated that in 1962 the total income security payments will provide

for about 8 per cent of forecast personal consumer expenditure, with the Old Age Security payments accounting for about 35 per cent of the total as compared with 32 per cent in 1961.

Until 1930 the assistance programs were of negligible financial significance to the economy and had provided for less than one-half of 1 per cent of total personal consumer expenditure. During the thirties this percentage rose rapidly to a peak of about 4 per cent in 1934 and then declined mildly until the outbreak of war, when it dropped rapidly to a level slightly above 1 per cent. In the period 1946-51, with both Family Allowances and Unemployment Insurance in full operation, the percentage fluctuated between 4.3 and 5.0. In 1952-57, with Old Age Security added to the other programs, the percentage moved irregularly between 5.8 and 6.6. Finally, in 1958 and later the impact of the \$55 monthly payments under Old Age Security and the sharp increase in Unemployment Insurance payments have brought the percentage within a higher range of 7.5 to 8.1. Thus the combined programs have been relatively stable in their economic impact, except for the marked upward movements (averaging 1.5 per cent of personal consumer expenditure) which have accompanied the major legislative changes.

As noted earlier, the categorical assistance programs are all administered provincially, and general assistance either in the same manner or locally. Federal financing provides for 50 per cent of Old Age Assistance and Disability Allowances and 75 per cent of Blindness Allowances. The 50 per cent federal financing rule also applies to General Assistance payments, except for nonsharable exclusions consisting of Mothers' Allowances (as defined by regulation), health care costs, traveling expenses (except as specified), funeral expenses, and all assistance not based upon a needs-tested budget deficit. However, the allowable needs-tested benefits are sharable without upper limits either individually or in the aggregate, provided they are generally and consistently available. The pattern of use of sharable general assistance payments is quite consistent across the country except for British Columbia (a high-income province) and Newfoundland (a low-income province). In both of these cases the sharable general assistance is about twice the national average when related to population and about one and one-half and three times, respectively, when related to disposable personal income. All assistance programs are financed from general tax revenues, although occasionally there are informal designations of particular taxes as being for welfare and other allied purposes.

Family Allowances and Old Age Security are administered in combined fashion by a special branch of the Federal Department of National Health

and Welfare. The Family Allowances are financed from general revenues, but Old Age Security is financed through a fund created from a special flat rate tax levied on a composite tax base consisting of: (1) sales at the manufacturer's level of most consumer commodities except food (the same tax base as that for the general manufacturers' sales tax); (2) taxable corporate profits; and (3) the first \$3,000 of each individual taxpayer's personal taxable income.

The original flat rate tax of 2 per cent (or the "2-2-2" formula as it was called) was increased during 1959 to 3 per cent (or a "3-3-3" formula as it is now called). During the history of the program, the earmarked tax revenue has chronically fallen short of the benefits paid, and the successive deficits have been provided for by budgetary expenditure or other fiscal methods. The revenue shortfall over the ten years 1952-61 has been about 13 per cent, or an average of \$60 million per year. On the other hand, federal government sharing in the financing of all assistance programs has averaged \$49 million per year less than the peak level attained in 1951 immediately prior to the commencement of Old Age Security, and, of course, the assistance sharing might have been expected to increase substantially in the absence of the Old Age Security program. In addition, the marginal income tax on taxable Old Age Security payments has recovered several million dollars each year (probably averaging close to \$10 million).

Unemployment Insurance is administered federally by the Unemployment Insurance Commission (which also operates the National Employment Service), an adjunct of the Federal Department of Labour. Wagerelated contributions (currently at 94 cents each for employer and employee in the highest wage class) are paid into the Unemployment Insurance Fund, together with a 20 per cent federal government supplement from general revenues (administrative costs are also borne by the federal government). The program has preserved a stable relationship between contribution rates and benefit levels, both historically and as between wage classes. There has been comparatively little internal subsidy as between wage classes, since the higher unemployment rates of the lower wage groups have tended to be offset by the larger proportion of the higher wage groups who have dependents and increased benefit levels in consequence. On the other hand, the complete absence of merit rating has caused substantial interindustry subsidy, and this has been aggravated by the seasonal benefits program which, in recent years, has provided high off-season benefits to workers whose wage rates are inherently high because of the seasonal character of their employment.

The Unemployment Insurance Fund (invested entirely in federal

government direct or guaranteed obligations) reached a maximum of about four years' income and outgo in the mid-fifties. Since then, owing to the combined influences of the economic climate, liberalizations of coverage and abuses of the system, it has dwindled rapidly to the point where, under the current rules of the game, it will be exhausted during the coming winter. In July, 1961, the federal government appointed a fourman Committee of Enquiry headed by Mr. E. C. Gill (a Fellow of the Society of Actuaries) to review the operations of the Unemployment Insurance Act and to make recommendations regarding the winter unemployment problem and the abuses and deficiencies in the insurance system. Since the Committee has already conducted its hearings and is expected to report in the near future, it is inappropriate at present to discuss the Unemployment Insurance system in detail. However, attention may be drawn to the life insurance companies' submission to the Committee, which recommended contributory subsidy-free methods of dealing with normal unemployment hazards at an average full-employment level, together with appropriate tax-financed extensions to deal with abnormal situations and prolonged underemployment.

## PROGRAM COVERAGE-RECIPIENTS AND BENEFIT LEVELS

The Family Allowance children currently total about 6.6 million and constitute about 36 per cent of Canada's population. With their mothers (to whom the allowances are paid) they account for more than half of all Canadians. Old Age Security beneficiaries form about 5 per cent of the population, and unemployment insurance, categorical assistance, and general assistance each have benefit rolls which average about 2 per cent of population. Allowing for dependents of unemployment insurance and general assistance recipients who are not qualified beneficiaries under other programs, and the overlap between Mothers' Allowances and Family Allowances, it is estimated that almost half of the population is directly recognized in the income-security benefit structure. Furthermore, it may be estimated that in an average month at least three persons out of four are in spending units where income-security payments form part of current income receipts. Of course, the ubiquitous character of Family Allowances accounts for much of the pervasiveness of income security payments in Canada, but, even if children who are not recognized in one of the other benefit structures are not counted, about one person in six in the population is an income-security recipient or a dependent recognized in the benefit structure.

In 1961 the Old Age Security benefit rate of \$55 monthly (also the maximum benefit rate under the sharable categorical assistance programs)

provided for about 50 per cent of average per capita personal spending. The current rate of \$65 monthly is estimated to provide for about 57 per cent of average per capita personal spending in 1962. During the war and postwar years, the relationship of the benefit rate to per capita spending has varied between 41 and 61 per cent, the normal tendency being to decline with rising spending but with marked upward shifts at the points of change in the benefit level, which has been increased six times from an original level of \$20 monthly.

In 1961 the maximum unemployment insurance benefit rate for a person without dependents was at a level of about 106 per cent of average per capita personal spending. Since the war this relationship has ranged from a low of 83 per cent in 1951 to a high of 108 per cent in 1960. For a worker with a dependent the maximum rate per person was at a level of 71 per cent of average per capita personal spending in 1961 (the postwar range being from 51 to 72 per cent). In a typical case of a worker with a dependent spouse and a child in the \$8 monthly Family Allowance age group, the maximum unemployment insurance benefit plus the Family Allowance provided for about 49 per cent of average per capita personal spending for each of the three persons. This relationship has varied between 39 and 50 per cent during the postwar period.

While maximum rates for General Assistance and Mothers' Allowances vary as between provinces, they are, in general, consistent with the pattern established by Old Age Security and Unemployment Insurance. In addition it should be noted that the presence of Family Allowances (even at their current low level of about 6 per cent of average per capita personal spending) has permitted considerable simplification in other income security programs and, indeed, in wage-rate negotiations which tend to ignore dependent children in the determination of wage rates.

#### GENERAL PATTERN

While Canada makes substantial use of assistance programs and income-related unemployment insurance, the salient feature of her income security programs is the massive reliance upon the universal flat benefit programs with eligibility determined by demographic characteristics alone. The income security system as a whole is administered very largely at the federal government level, with most of the remainder subject to federal-provincial agreements. Financing is mainly from general revenues or through earmarked portions of general taxes. The origin of Family Allowances in 1945 is traceable to a desire to augment personal spending power during an imagined postwar recession, translated into a political move designed to induce widespread popularity. Continuance of the pro-

gram in virtually unchanged form indicates its stable character and common acceptance. Old Age Security resulted from a unanimous recommendation by a Joint Parliamentary Committee in 1950. Faced with a situation where almost half of the population age 70 and over were qualified for means test pensions, the committee examined and discarded approaches involving income-related pensions and individual deferred equity. Factors favoring the choice of universal flat benefits were the immediate maturity of the program, the extreme administrative simplicity, and the analogy presented by the Family Allowance program.

Forecasts of the age distribution of Canada's population and of the labor force participation rates indicate that, in the absence of legislative change, the combined cost of Family Allowances and Old Age Security, expressed as an amount per person of working age or per member of the labor force, will be approximately level for the foreseeable future. This means that pay-as-you-go financing is entirely appropriate for these programs taken in combination, since legislated increases in benefit levels may be assumed to reflect rising levels of personal income and expenditure. However, it is also interesting to note that financing on an individual equity basis (where each person, during his working years, repaid his Family Allowances and prepaid his Old Age Security) would produce contribution rates at about the same level as on a pay-as-you-go basis. Furthermore, at any one time the aggregates of unrepaid allowances and prepaid pensions would be of comparable magnitudes, so that the net fund (positive or negative) for the whole population would be small, and, therefore, the interest assumption used would have little influence on the contribution rates.

From the foregoing it may be concluded that a country with a stable ratio of workers to population may operate programs of flat demographic payments covering the pre- and postworking ages without having to resort to the complexities of an explicit contribution system. Indeed, in the presence of highly graduated personal income taxation, the flat benefit programs may be regarded as negative taxes in the process of income redistribution. An examination of the average per capita personal income data by province indicates that the combined effect of direct taxation and personal transfer payments is to reduce the income disparities between provinces above and below the national level by about one-sixth and that more than half of this reduction is attributable to the effect of personal transfer payments which, of course, have a large flat benefit content.

## PROSPECTIVE DEVELOPMENTS

Canada now has public income security programs for all recognized categories except temporary disability in the case of members of the

labor force. In this area the only public program is the facet of unemployment insurance which provides for continuance of benefit in the event of illness arising while receiving unemployment insurance. Apart from its administrative convenience (i.e., the difficulty of proving disability in order to cancel benefits), this feature of unemployment insurance recognizes that the problem of temporary disability lies in the area of employer-employee relationships as long as the individual has an employer and that only during the course of unemployment does the problem fall naturally in the area of a public program. While private cash sickness and paid sick-leave programs are not as widespread in Canada as in the United States, there does not appear to be a widespread demand for public action in this area, but this is likely to develop if and when the assistance programs find temporary disability of workers to be a large and burdensome problem. It is to be hoped that, if compulsion becomes unavoidable in this area, it will occur at the provincial level in a manner similar to the statutes which prescribe minimum wages and working conditions. In other words, the imposition of a liability on employers to provide minimum-wage-related cash sickness benefits (in a manner similar to the New York State law) represents the least unsatisfactory form of compulsion if this problem becomes the subject of legislation.

The most unsatisfactory sector of Canada's present income security system is the means testing which pervades the categorical assistance programs. A mechanism applied annually to prove that the majority of the program beneficiaries are fully qualified and the others subject to various and sometimes arbitrary reductions is hardly conducive to the development of sound relationships in the community. The process acts as a deterrent to prior thrift and current productive activity and tends to disrupt normal family living arrangements. Furthermore, when it ignores varying individual needs and merely equates the resources of program beneficiaries, it leaves many problems unresolved.

It is not surprising that during the last several years the life insurance companies, among others, have suggested that the universal flat benefit programs should be extended into the areas of total and permanent disability and survivorship dependency in such a way as to permit the discontinuance of categorical assistance. At the same time it would be expected that the general assistance programs would be retained to provide needs tested benefits at the periphery of the universal flat benefit programs and needs tested supplements for the small minority of flat benefit recipients who have virtually no other resources. Even if the extensions also included premature aging to deal with people below age 70 who are too old to work, these suggestions involve only minor expansion of the

present program coverages in terms of either additional beneficiaries or added cost.

Another area of logical program extension relates to the Family Allowance age limits and benefit levels. With the widespread demand in Canada for higher educational attainment and greater vocational training (and in the absence of any form of national service which would tend to further these objectives), there is a case for extension of the Family Allowance system to young people who are still at school or undergoing vocational training. Quebec has already taken a step in this direction, but a national extension with further scaling of benefits by age would appear to be a more preferable course.

In the area of Old Age Security the several political parties have continued to advance proposals for expansion in levels of benefit and number of persons eligible and for modifications in the form of structure. At the present time the old age population includes about one person in eleven (using either the United States definition of age 62 and over or the United Kingdom definition of males age 65 and over and females age 60 and over). The Old Age Security beneficiaries age 70 and over form 54 per cent of the old age population, while Old Age Assistance is paid to an additional 6 per cent. Allowing for coverage under unemployment insurance, disability allowances, and general assistance, probably two-thirds of the old age population are income-security recipients. The form of publication of Canada's national accounts, income-tax statistics, and pension-plan operating statistics permits estimates to be made of the aggregate disposable income position of the old age population (the only departure from the conventional national accounts concept being the inclusion of the amount by which privately provided pensions exceed their investment income element). It is estimated that at the present time the old age population enjoys current disposable income from all sources at a per capita level approximating that for the population as a whole and significantly in excess of the average per capita spending level of the community. In addition, because of the relative importance of the flat benefits under Old Age Security, income resources are more evenly distributed in old age than for the population as a whole.

Under these conditions desirable augmentation of the old age income resources can best be handled by encouragement of further growth and expansion in the private pension system and by stimulation of various other forms of private saving for retirement. In addition, the chronic capital shortage in Canada provides a strong economic reason for a massive upward movement in private pension saving, since the indica-

tions are that such saving is additional to, rather than in lieu of, other forms of long-term saving.

If there is to be further old age security legislation in Canada, it is my considered view that it should not take the form of an income-related "second deck" whether with contracting-out or not. If compulsion is required at all—and I have doubts as to its necessity—it should take the form of the approach proposed under Ontario's Bill 165, which imposes upon employers a liability to provide for minimum portable pensions as an addition to the legislation relating to pay rates and working conditions to which they are now subject. This form of approach seems to fit the Canadian pattern of income security better than any other, since it avoids the provision of income-related public benefits in an area where a labor-force relationship need not be a qualifying feature of the program. In this latter connection it should be observed that unemployment insurance, workmen's compensation, and cash sickness benefits by definition are confined to a labor-force relationship, as a consequence of which community equity requires a self-supporting contribution system. It is this situation, together with the implied continuance of labor-force participation, which leads to the characteristically income-related benefit formulas of these programs. But other income security programs dealing with old age, total and permanent disability, survivorship, and childhood dependency need not rest upon a labor-force relationship. In these areas Canada has already shown a marked preference for universal flat benefits defined in demographic terms, and the intrusion of earnings-related public programs seems illogical as well as unnecessary.

In the particular case of old age, a supplementary earnings-related "second deck" could only be justified on a basis completely free of subsidy, both external and internal, since the universal flat benefit program has well demonstrated its capacity and flexibility in dealing with subsidized old age benefits. Thus a "second deck" should rest squarely on principles of individual equity and, therefore, can be handled with at least equal facility at the private rather than the public level. Nor is it satisfactory to suggest an overfinanced "second deck" akin to the United Kingdom graduated benefits, since Canada's general taxation system, with or without earmarking, provides a more efficient and equitable method of deriving the finances for income security programs in all cases except those where a contribution system is a necessity by reason of restricted eligibility for benefits or particular rates of benefit.

Thus I believe that, except in the essentially labor-force-related programs, the state can play its most effective role by the provision of flat

benefits to demographically defined groups at rates designed to minimize residual needs testing and to provide desirable levels of spending power when taken in conjunction with resources derived from private insurance, pensions, and savings programs.

#### APPENDIX

# RELATIONSHIP OF INCOME SECURITY TO CONSUMER SPENDING

In making comparisons between the benefit levels provided under the income security programs in the United States, the United Kingdom, and Canada, difficulties arise because of the three different currencies and because of the different internal price levels and living standards which obtain. However, since the object of income security is to provide for the continuance of personal consumer expenditure (and not personal taxes or

TABLE 1
CONSUMER SPENDING EQUIVALENCE OF INCOME SECURITY PAYMENTS

	RELATION TO AVERAGE PER CAPITA CONSUMER SPENDING	Table of Conversions*		
		United States Dollars per Month	United Kingdom Shillings per Week	Cana- dian Dollars per Month
Average per capita consumer spending in 1961.	100 %	154	126	111
Conversion from U.S. dollars per month Conversion from U.K. shillings per week Conversion from Canadian dollars per month		122	82 100 114	72 88 100
U.S. December, 1961, averages: All retired workers	49 % 41 % 44 %	76 63 68	62 52 56	55 46 49
All retired workers		70 56	57½ 46	50 40
1961 level—all beneficiaries	50 % 59 %	76 90	63 74	55 65
U.K. family allowances: Second child Subsequent children Canada—family allowances:	6.3% 7.9%	10 12	8 10	7 9
Children under ago 10	5.4% 7.2%	8 11	7 9	<b>6</b> 8

<sup>\*</sup> For convenience, primary figures for each country are italicized. There are a few apparent minor discrepancies in the converted figures due to calculations being carried out prior to rounding.

saving for which incomes in general must also provide) and since the levels of the program payments are determined by the individuals involved as beneficiaries, an appropriate international standard of comparison is the relationship of program payments to the average per capita consumer spending levels in each country. Refinements in the comparison (such as the exclusion of durables and luxuries from consumer expenditure or the assignment of lower weights to children in the averaging process) do not affect the relative spending levels materially.

Table 1 is based on average per capita consumer spending in 1961 in the three countries. Consumer expenditure is taken at the totals given by the National Accounts estimates, and midyear population estimates are used as representative of average population within the year. For convenience, and because of the form of the main income security programs, the United States and Canadian figures are given in dollars per month and those for United Kingdom in shillings per week.

Comparisons with previous years indicate that the relationship of average per capita consumer spending as between United States and Canada has been extremely stable over the last decade but that in recent years the sterling per capita averages have been rising slightly faster than those in dollars. On the basis of consumer spending equivalence, the Canadian dollar is worth about 50 per cent more than the official exchange rate of United States \$0.925 and the United Kingdom shilling about double the official exchange rate of United States \$0.14.